

BEST AVAILABLE COPY**REMARKS**

The above supplemental amendment and these remarks are further in response to the Office action of 13 July 2004 by Examiner Narayanswamy Subramanian.

Applicants file this amendment and reply under 37 CFR 1.111 in response to the action of the Examiner reopening prosecution to cite newly discovered art in view of the appeal filed on 5 Feb 2004.

Claims 12-19 are in the case, none having been allowed.

Record of Interview

Applicants' attorney expresses appreciation for courtesy extended by Examiner Narayanswamy Subramanian during a telephone interview initiated by the undersigned on 18 Apr 2005 to obtain the correct patent number for the Anderson reference. At that time applicants' attorney also requested the assistance of the Examiner in identifying allowable features of the invention, and the Examiner indicated that he would look at the case a call back. No

END919980071US1

16 of 42

S/N 09/244,304

communication subsequent to that request has occurred.

35 U.S.C. 103

Claims 12, 14, and 15 have been rejected under 35 U.S.C. 103(a) over Anderson et al (U.S. Patent 6,05,380, sic 6,058,380, hereinafter Anderson) in view of Lyke et al (U.S. Patent 5,151,948, hereinafter Lyke).

Applicants claims, as amended, all distinguish the Anderson, and Lyke references, and their asserted combinations, on at least the following points.

First, Applicants application is for accounts payable invoices that reference purchase orders. Second, Applicants provide a new method for detecting and rejecting back to a vendor duplicate invoices without posting them. The point here is that duplicate invoices are rejected, not simply reported to someone for manual processing. Third, Applicants' method operates at the purchase order item level.

With respect to claims 12, 14, and 15, applicants traverse the Examiner's characterizations of the teachings

END919980071US1

17 of 42

S/N 09/244,304

of Anderson.

Anderson is an account payable application for customers receiving invoices from and making payments to suppliers where by nature the invoices are on periodic cycles and are typically within a given range of values, e. g. suppliers of gas, electric, telephone, leasing or maintenance. The Anderson system allows all invoices to be reviewed by the customer. A customer-vendor set of criteria is set-up for various 'reasonability check' values. Each new invoice is analyzed and given a status of green, yellow or red, based on statistical, threshold, or fixed value criteria. These various statistics are provided for communicating reasonability criterion to the invoice reviewer. [See Anderson, col. 6.] This is an entirely different system from Applicants' invention.

With respect to Anderson, the Examiner refers to Column 4, which states:

"Each of the paper invoices and Electronic Invoices (collectively "Invoices") is stored in a distinct record in an invoice table in intermediary database 66. Each record has an identifier that indicates the type

END919980071US1

18 of 42

S/N 09/244,304

of Invoice... Before an Invoice is stored in intermediary database 66, however, certain checks are performed to maintain the integrity or consistency of the data stored in intermediary database 66. For example, if a received Invoice does not include an invoice number, a unique invoice number is generated for the Invoice based on an algorithm, e.g., the account number plus designated date. All EDI Invoices are guaranteed to have an invoice number as part of the EDI transaction. Moreover, checks are made to ensure that the Invoice is associated with an existing account, that the Invoice has been received in the manner that the customer has specified for that account, that the Invoice is not a duplicate and that the vendor has sent all expected Invoices. If an exception is detected, action is taken in accordance with Table 1 and an exception report is generated in accordance with Table 2." (Anderson, Col. 4, lines 21-41.)

Based on these references, the Examiner asserts that Anderson teaches:

1. preprocessing original electronic invoices before

END919980071US1

19 of 42

S/N 09/244,304

introduction into an accounts payable data base
original electronic invoices received from a
vendor to identify duplicate invoices;

2. identifying invoices having same vendor invoice designation, same purchase order number; and same item number is inherent in 810/811 invoices (Office Action, page 2).

Applicants traverse. There is no basis in Anderson for stating that electronic invoices are preprocessed and selectively rejected back to the vendor without being posted to an accounts payable database. The Anderson "intermediary database" (at a bank) clearly receives all invoices, and those invoices pertaining to a particular customer are synchronized to a customer database; and, more importantly, Table 1 specifically states that responsive to identifying a duplicate invoice, no action is required -- it is referred to the intermediary for review, and Col. 4, line 26 clearly teaches that the checks of Table 1 are conducted before an invoice is stored in the intermediary database -- NOT that the checks of Table 1 are conducted to determine whether an invoice is to be added to the intermediary database at all, and NOT added to that database if a Table 2 check fails.

END919980071US1

20 of 42

S/N 09/244,304

The Anderson "customer" is not Applicants' "vendor", but rather customers of a bank. These bank customers in turn have vendors and it is invoices from those vendors that are being processed through the bank (intermediary) to the customer.

The Examiner then states that Anderson Table 2 teaches rejection "to an intermediary" an electronic invoice identified as a duplicate invoice without posting that original electronic invoice to the accounts payable data base (Office Action, pages 2-3). Applicants traverse. Anderson Table 2 includes the following entry:

"Report	Recipient	Originator"
"Duplicate Invoice Report	Intermediary	Automatic"

The "intermediary" is not the customer/vendor, but a bank. There is no indication that a duplicate invoice is rejected back to the vendor, nor that it is rejected back without posting the invoice to an accounts payable database.

The Examiner states that Anderson does not teach the steps of calculating a net sum of items for a record (which applicants teach as the manner for identifying duplicate

END919980071US1

21 of 42

S/N 09/244,304

invoices) (Office Action, page 3). For calculation of net sums to identify duplicate invoices the Examiner refers to Lyke. Applicants traverse.

The Lyke reference describes a computerized bank account reconciliation application system, not an accounts payable system. It reads bank account items for a statement period from tape media. It reads and enhances check images and deposit vouchers. It allows a computer operator to compare the checks and vouchers, correcting errors as needed, and reconciling the account. It teaches that an error could have been made if a check or deposit was posted twice, resulting in a duplicate. But it does not teach Applicants' zero sum calculation at the item level in order to identify duplicate invoices in an accounts payable system.

The Examiner refers to Lyke, Col. 2, lines 51-68, which teaches:

"The present invention provides a method and system for fast and accurate detection and correction of errors in a document processing operation in which the total of a series of transaction documents must be

END919980071US1

22 of 42

S/N 09/244,304

balanced to match the total shown on an associated depositor summary document... the summary documents processed include customer deposits and the individual transaction documents associated with a particular summary document include checks. However, it will be recognized that the principles and features of the present invention are not restricted to banking applications, but have broader applicability to various other applications involving the processing and balancing of individual transaction documents and associated summary documents." [Lyke, Col. 2, lines 51-68.]

Drawing on this teaching, the Examiner states:

"Lyke teaches the steps of calculating a net sum amount of transaction documents and identifying an error when the total of a series of transaction documents do not match the total shown on an associated summary document." [Office Action, page 3.]

Applicants traverse. There is no statement or suggestion in Lyke of calculating a "net sum of items on invoices" which, in the manner of Applicants' claims

END919980071US1

23 of 42

S/N 09/244,304

requires the following:

"...calculating a net sum amount of items on invoices identified as having said same vendor invoice designation, said same purchase order number, and said same item number; identifying as a duplicate invoice an original electronic invoice for which said net sum amount is greater than zero..." [Claims 12, 14 and 15.]

However, the Examiner draws some very tenuous comparisons between applicants claims and Lyke, by stating:

"The documents are interpreted to include invoices identified by the Anderson disclosure and the matching of the totals is interpreted to include the step of determining if the net sum amount is greater than zero." [Office Action, page 3.]

Applicants traverse this characterization of Lyke and basis for combination with Anderson. This is a classic example of using Applicants own disclosure as a road map for assembling disparate teachings in derogation of the claims. Neither Anderson nor Lyke, nor their combination, teach a process of identifying as duplicate invoices invoices having same invoice designation, purchase order number, item number for

END919980071US1

24 of 42

S/N 09/244,304

which a net sum amount is greater than zero and automatically rejecting such an invoice back to the vendor without entering that invoice to an accounts payable database.

Lyke is determining "the total of a series of transaction documents [which] must be balanced to match the total shown on an associated depositor summary document". This does not teach Applicants claimed algorithm at the point of determining zero sum for invoices having same invoice designation, purchase order number, and item number, as the claim specifically requires.

Anderson's intermediary database, and its corresponding customer databases are, in effect, accounts payable databases, and Anderson clearly teaches that all invoices are entered to those databases whether or not they are determined to be duplicates. Anderson is completely silent on how duplicate invoices are identified, and Lyke does not supply that missing element of calculating the net sum on invoices selected as having same invoice designation, purchase order number, item number. Lyke, most specifically, has no teaching of matching totals based on item number.

END919980071US1

25 of 42

S/N 09/244,304

The Examiner states:

"The step of communicating a transaction from an intermediary to the vendor is old and well known."

[Office Action, page 3.]

Applicants traverse. Perhaps what the Examiner states is correct, but it has no bearing on Applicants' claimed invention. Applicants are not claiming communicating a transaction from an intermediary to a vendor, but rather rejecting a duplicate invoice received from a vendor directly back to the vendor, not through any intermediary, without adding that duplicate invoice to the accounts payable database. Which again clearly establishes Applicants distinction: in Anderson, the intermediary database and its customer copy of portions of that intermediary database, which together may be analogous to an accounts payable database, receive the invoice whether or not it is identified as duplicate, and there, if a duplicate, it must be processed by accounts payable personnel. This is precisely the situation in the art which Applicants' invention is intended to overcome.

The Examiner states:

END919980071US1

26 of 42

S/N 09/244,304

"Both Lyke and Anderson are concerned with the problem of identifying errors in processing transaction documents. It would have been obvious to one with ordinary skill in the art at the time the invention was made to include the steps taught by Lyke to the disclosure of Anderson. The combination of the teaching taken as a whole suggest that the accounts payable department would have benefited (sic, benefitted) from early detection of duplicate invoices." [Office Action, page 4.]

Applicants traverse. There are no steps taught by Lyke equivalent to the zero sum calculation specified in the claims. There is no teaching in either reference of automatically rejecting back to the vendor duplicate invoices without logging those invoices to the accounts payable database (in fact, Anderson specifically teaches away from such, where duplicate invoices are added to the database and flagged for evaluation). That an accounts payable department would have benefitted by "early detection" is not taught by either reference, and certainly does not teach automatically rejecting back to the vendor duplicate invoices identified by zero sum calculations at the item level (as is clearly stated in all of Applicants

END919980071US1

27 of 42

S/N 09/244,304

claims) without posting such invoices to the accounts payable database.

Applicants urge that the rejection of claims 12, 14, and 15 be reconsidered and that the claims be allowed.

Claims 13 and 16-19 have been rejected under 35 U.S.C. 103(a) over Anderson in view of Lyke, and further in view of Smith et al (U.S. Patent 5,111,395, hereinafter Smith).

Applicants traverse.

With respect to claims 13 and 17, the Examiner refers to Anderson and Lyke, as applied to claim 12. Applicants have discussed the Anderson and Lyke references above, and based on just that analysis argue that the Examiner has not established a prima facie case of obviousness with respect to claims 13 and 17.

With respect to claims 13 and 17, the Examiner states that

"Anderson and Lyke combined do not explicitly teach the steps of first sorting said original

END919980071US1

28 of 42

S/N 09/244,304

electronic invoice against an accounts payable production table for same vendor and same vendor invoice number, second sorting hits from said first sorting for same purchase order billed; and third sorting hits from said second sorting for same items billed on purchase order." [Office Action, page 4.]

Applicants concur.

However, the Examiner continues:

"Smith teaches the step of sequentially sorting the records by various fields within a record in order to identify duplicate records."

Applicants traverse.

Applicants are not merely sorting by various fields, but rather claim a specific order of sorts of specific fields in order to determine the net sum. Claim 13, for example, recites:

"...first sorting said original electronic invoice against an accounts payable production table for same

END919980071US1

29 of 42

S/N 09/244,304

vendor and same vendor invoice number;

"second sorting hits from said first sorting for same purchase order billed;

"third sorting hits from said second sorting for same items billed on purchase order;

"calculating a net sum of said same items..."

This is what Smith teaches:

"Such systems are designed to eliminate a duplicate record only when all data elements of the duplicate match exactly with the data elements of another record. Key elements of the record are combined to form a matchcode, which is then attached to the original record and carried throughout the merge/purge process... In prior art merge/purge systems a duplicate record is identified only if all elements of each matchcode match exactly.... As long as the set of criteria in one of the test sequences is satisfied, a duplicate is identified." (Smith, Col. 1, lines 39-45, 49-51, Col. 13, lines 19-21).

END919980071US1

30 of 42

S/N 09/244,304

"1. An automated fund collection apparatus comprising:

means for creating a file, said file comprising a plurality of records, each record including a name and address of an individual,

means for selecting portions of each record,

means for making a first comparison between a first predetermined portion of a first record and a first predetermined portion of at least one second record to determine if said first portions match,

means for identifying at least one duplicate record in said file when at least said first portions match,

means for making a second comparison between a second predetermined portion of said first record and a second predetermined portion of said at least one second record to determine if said second portions match,

END919980071US1

31 of 42

S/N 09/244,304

means for identifying at least one duplicate record in said file when at least said second portions match and said first portions do not match,

means for eliminated identified duplicate records from said file and means for creating a second file of unique records, wherein no two records identify the same individual,

means for creating a list of individuals from said second file of unique records,

means for sending each individual on said list a proposal for an electronic funds transfer agreement in which each individual agrees to make automatic and periodic transfers of funds from each individual to a fund collection entity and, means for printing a plurality of checks and means for sending one of said plurality of checks to each said individual." (Smith, claim 1).

Applicants traverse the Examiner's characterization of Smith and the rationale for combining Smith with Anderson and

END919980071US1

32 of 42

S/N 09/244,304

Lyke. Smith's matchcode is not applicants net sum. Smith does not teach any step of sequentially sorting records by various fields nor, more importantly, by the specific fields claimed by applicants.

Applicants traverse the Examiner's statement that modifying Anderson to go through Applicants specific sorting steps (See Office Action, pages 4-5) would be obvious because "it improves the efficiency of the system by early detection of duplicate invoices and avoid [sic, avoids] storing duplicate records in its database. It also provides a system that is user friendly." Neither Anderson, nor Smith, nor Lyke make these statements. The Examiner is drawing on Applicants own teachings. None of the references teach not storing duplicate records in an accounts payable database, and "improved efficiency" is no basis for combining references which, in the aggregate, still fall short of Applicants' invention.

With respect to claims 16, 18, and 19, the Examiner states at pages 5-7 of the Office Action (quoted in bold, with Applicants comments inserted):

"Anderson teaches a method... for operating an

END919980071US1

33 of 42

S/N 09/244,304

accounts payable computing system, the method comprising: receiving an original electronic invoice from a vendor (See Anderson Column 2 lines 13-17);...

"...assuring that during said translating the count of translated invoices rejected and accepted equals the number of original electronic invoices translated, and feeding accepted invoices for preprocessing (See Anderson Column 3 lines 48-55 and Column 4 lines 26-29);..."

Applicants traverse. Anderson specifies the checks which he makes, and none of them include this check of count of translated invoices, and Anderson does not teach the specific preprocessing of Applicants' claims (which includes the zero sum calculation to determine duplicate invoices and the rejection back to vendors of such invoices without adding them to the accounts payable database. As previously explained, Anderson specifies that duplicate invoices are added to the intermediary database.

"...preprocessing invoices accepted for preprocessing as received from a trading partner vendor, said

END919980071US1

34 of 42

S/N 09/244,304

preprocessing selectively validating a transaction, calculating line item accounts, deducting sales tax, and identifying original electronic invoices which are duplicate invoices before introduction into an accounts payable data base (See Anderson Column 4 lines 26-29, checks are interpreted to include these features),..."

Applicants traverse. Anderson refers to "checks", and these are listed in Table 1, none of which suggest calculating line item accounts and their use in determining duplicate invoices.

"...said identifying duplicate invoices including: auditing only debit invoices one at a time for duplicate invoices and committing to said accounts payable data base only those debit invoices which are not duplicate invoices (See Anderson Column 2 lines 47-48, debit invoices implied in the disclosure);..."

Applicants traverse. Anderson (at Col. 4, line 43) states that all expected Invoices are tracked, and these are not limited by Anderson (nor by industry practice) to debit invoices.

END919980071US1

35 of 42

S/N 09/244,304

"...identifying invoices having a same vendor invoice designation, same purchase order number, and same item number (See discussion of claim 12 above);..."

Applicants have traversed this assertion previously, with respect to claim 12. Applicants' algorithm for detecting duplicate invoices requires the evaluation of invoices at the item level, and there is no such teaching in Anderson.

"...said identifying including execution of check verbs, each said check verb being satisfied to identify said invoice as a duplicate invoice; said check verbs including determining that this vendor is a vendor for which duplicate invoice checking is to be performed (See Anderson Column 4 lines 26-29, 34-38 and Table 1, the checks are interpreted to include these features),..."

Applicants traverse the above and the following two statements. Here Applicants are claiming the specific programing structure of check verbs employed for identifying duplicate invoices, and the general statements in Anderson to which the Examiner refers have no such teachings. The

END919980071US1

36 of 42

S/N 09/244,304

Examiner may "interpret" Anderson to include such teachings, but there is nothing in Anderson to suggest the specific analysis and calculations set forth; most specifically, the zero sum calculation at the item level.

"...determining that there is a purchase order history of previous purchase orders for said invoice (See Anderson Column 12 lines 20-24, invoice analysis is interpreted to include analysis of purchase order history),..."

"...and determining for each item on said invoice a sum of its purchase order history, with said sum being greater than zero for at least one said item (See Anderson Column 4 lines 26-29, 34-38, the checks are interpreted to include these features);..."

"...automatically communicating a duplicate invoice rejection transaction to an intermediary for an original electronic invoice identified as a duplicate invoice without posting said original electronic invoice to said accounts payable data base;..."

END919980071US1

37 of 42

S/N 09/244,304

Applicants traverse the above characterization of the teachings of Anderson, as previously discussed. Applicants are not claiming communicating to an intermediary, but rather directly back to the vendor. Anderson's intermediary is not a vendor but rather a bank and, with respect to the customer version of that database, a customer who in turn has vendors. And Anderson does not teach the concept of "without posting", as previously discussed with respect to claim 12. That is, Anderson teaches that duplicate invoices ARE posted to the intermediary database. The Examiner is here parsing Applicants claims using language (intermediary) from the art (Anderson), and not applicants own language (vendor), and in so doing improperly straining to read Anderson on the claim.

"...posting said invoice to a workflow database and assuring that the number and amount of invoices posted to said workflow database equal the number and amount of translated invoices accepted for preprocessing (old and well known in the art); logging to an error queue invoices failing audit for subsequent manual processing (See Anderson Table 12);..."

"...logging to an exceptions and warnings log table as

END919980071US1

38 of 42

S/N 09/244,304

exceptions invoices which are determined during preprocessing to be duplicate invoices and as warnings invoices which during preprocessing were recalculated or had sales tax deducted (See Table 12);..."

Applicants demur. The above two limitations are in the claim in order to complete the description of a fully operational system for processing invoices, and are to be considered as part of the overall environment when considering the claim as a whole.

"...introducing said original electronic invoices not identified as duplicate invoices into said accounts payable data base (See discussion of Claim 12 above)."

Applicants agree. Not only are invoices which are not identified as duplicate invoices introduced into the accounts payable database by Anderson, but all invoices are. This limitation takes on significance in combination with the prior claim limitation that invoices identified as duplicate invoices are NOT introduced into the accounts payable database - and Anderson does not teach that.

The Examiner refers to Lyke and to Smith for elements

END919980071US1

39 of 42

S/N 09/244,304

missing from Anderson, as discussed previously respect to claims 12 and 13. Applicants traverse, and argue that the same distinctions and traversals asserted above with respect to claims 12 and 13 also apply to claims 16, 18 and 19.

That is, Lyke is cited for teaching sorting all inbound records in debits/credits sequence, calculating a net sum of items, and identifying a duplicate record as a record for which the net sum is greater than zero. However, as previously explained, Lyke does not teach Applicants claimed algorithm at the point of determining zero sum for invoices having same invoice designation, purchase order number, and item number, as the claim specifically requires.

Smith is cited for teaching the step of "sequentially sorting the records by various fields... [T]his sorting would have helped the system sort the records into debits/credits sequence and process them differently." [Office Action, page 7]. Applicants, on this point, claim "sorting all inbound invoices in credit/debit sequence; auditing only debit invoices one at a time...". Applicants traverse this characterization and application of Smith. Smith does not teach sorting on debit/credit sequence, and auditing only debit invoices one at a time, just "sorting

END919980071US1

40 of 42

S/N 09/244,304

... by various fields". The Examiner's observation that doing so allows the system to "process them differently" does not provide adequate basis for implying Applicants specific algorithm from Smith's teachings when fairly characterized and understood.

In traversing the rejections of claims 16, 18 and 19, applicants argue that the Examiner has used hindsight reasoning based on Applicants own disclosure to assemble concepts from the art references which bear little or no relevance to the concepts described and claimed by Applicants.

SUMMARY AND CONCLUSION

Applicants urge that the above amendments be entered and the case passed to issue with claims 12-19.

The Application is believed to be in condition for allowance and such action by the Examiner is urged. Should differences remain, however, which do not place one/more of the remaining claims in condition for allowance, the Examiner is requested to phone the undersigned at the number

END919980071US1

41 of 42


S/N 09/244,304

provided below for the purpose of providing constructive assistance and suggestions in accordance with M.P.E.P. Sections 707.02(j) and 707.03 in order that allowable claims can be presented, thereby placing the Application in condition for allowance without further proceedings being necessary.

Sincerely,

M. W. Beach, et al.

By


Shelley M Beckstrand
Reg. No. 24,886

Date: 5 Jul 2005

Shelley M Beckstrand, P.C.
Patent Attorney
61 Glenmont Road
Woodlawn, VA 24381

Phone: 276 238-1972

END919980071US1

42 of 42

S/N 09/244,304

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.